External Commercial Borrowings in India: An Analysis of Growth, Determinants and Impact

Synopsis

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1.0 Background

Ever since the beginning of the human civilization, the entire individuals as well as the group of humans are accelerated toward uplift of their living conditions. As the time passed the people made a momentous approach from 'toil to survival' to 'improving the quality of life'. With the process of globalization, the facets of improvement in quality of life, such as 'trade with other countries of the world' and availing the technologies which are abundant in a particular country got accelerated. This is not an easy process; it has several layers of various steps which are set up of the contradictory framework that has mound a fine shape to the development process. So, it becomes easy to understand and portrays a clear view of the components required in development of any economy.

The basic rationale behind the growth and development of any economy is the interconnection with various economies of the world. This interconnection of economies is basically due to the trade relations between them. The trade, domestic as well as the international leads a country to earn the foreign money or to increase its national income. The process of development takes place when a country's national income increases over a period of time. Another major rationale behind the development of an economy is the overseas investment, i.e., foreign direct investment (FDI), foreign portfolio investment (FPI) and external borrowings which compile a Balance of Payment (BoP) account of an economy.

The BoP statistics are systematic summary of the economic transactions of an economy with the rest of the world for a specific period of time. The BoP account of a country is controlled and operated by its central bank, which is responsible for its compilation and dissemination. BoP comprises of current account, capital account, errors and omissions and changes in foreign exchange reserves. Under current account, transactions are classified into export, imports and invisibles, and under the capital account, capital inflows are classified as debt and investments. Borrowings are further classified as official and commercial. It basically consists of external assistance, external commercial borrowings, trade credit and banking capital, including non-resident Indian (NRI) deposits. External commercial borrowings are the part of external debt; it helps in the development of an economy.

In a growing and emerging economy like India, there can be various alternatives to finance required capital. These may include short term (revenue) and long term (fiscal) sources depending upon the tenure. The capital sources generally include savings, surplus from public sector undertakings (PSUs) and internal and external borrowings. The economic situation of a country is analyzed by the savings by the domestic households and investment by the external sources (FDI). When these fall short or FDI inflow is not significant, country may resort to the borrowings from internal and/ or external sources.

Borrowing can take many forms; it can be in the form of loans or grants or external assistance. India, as an emerging economy consists of two types of external assistance one in the form of loans and other as grants. Grants are the aids or help that are provided to a particular economy by developed nations, the loans on other hand are debt owed by the government, businesses and people of a country to overseas lenders such as banks, the international financial institutions, foreign companies and other creditors meant to be repaid. Earlier, majority of assistance that India got was in the form of grants, but now, major portion of the external assistance received by India is in the form of loans.

In 1980s, most of the assistance to India was in the form of grants and even in 1990s the assistance was in the form of grants, but slowly when India moved to the developing stage and becoming self-sufficient, its grants reduced and more and more assistance turned in the form of loans (Singh, 2009). The sources of these loans, called as external debt, are International Monetary Fund (IMF), World Bank (WB), USA, UK etc. The external debts in India are classified as multilateral and bilateral loans, IMF loans, commercial borrowings, NRI deposits, rupee denominated bonds, long term and short-term debt.

External commercial borrowing (ECB) is a process of borrowings by a resident entity (Indian corporations and public sector undertakings) from non-resident entity in foreign currency. It includes commercial bank loans, securitized instruments such as floating rate notes and fixed rate bonds, convertible and non-convertible debentures, preference share, foreign currency convertible bonds (FCCB's), suppliers' and buyers' credit, credit from official export credit agencies, financial lease and borrowings from private sector windows of multilateral financial institutions, such as International

Finance Corporation, Asian Development Bank (ADB), AFIC, CDC, etc. It also includes Euro-issues and Global Depository Receipts (GDRs).

The Reserve Bank of India (RBI) is taking active steps to encourage greater foreign lending to the infrastructure sector and allow Indian Corporates borrow internationally on more favorable commercial terms than the significantly more expensive domestic debt. One of the steps which have been taken by the RBI is several amendments to the external commercial borrowing regulations to give greater flexibility to Indian companies in the infrastructure sector to avail of ECBs. It also issues guidelines for the use of ECBs. To cite, ECBs cannot be used for investment in stock market or speculation in real estate.

The main purpose of raising funds through external commercial borrowing is to meet the scarcity of resources in domestic market by raising low cost funds from foreign sources. When public sector undertaking and the private corporates need finance for expansion of their existing capacity and for fresh investment as well; and when domestic sources fail to accommodate their financial need, government provides an additional source of funds in the form of ECBs to these Indian corporate and PSUs. ECBs can be used for any purpose (rupee-related expenditure as well as imports) except for investment in stock market and speculation in real estate.

1.1 ECBs in India: The Historical Perspective

The Sahoo Committee Report (2015), while discussing historical account of India's approach to external commercial borrowings (ECBs) mentioned that during the period 1950s to the early 1980s, the domestic firms' reliance on international capital markets was restricted mainly to bilateral and multilateral assistance. With the passage of time commercial borrowings through international capital market came in to force due to the inadequacy of bilateral and multilateral sources of finance. In 1980s, in the context of the widening current account deficit, the traditional external sources of financing were found to be inadequate and were supplemented with commercial borrowings from international markets including short-term borrowings. The policy framework of ECBs in the second half of 1980s encouraged the financial institutions and PSUs to raise funds through international bodies.

In the 1990s, the Indian corporates' access to international capital markets increased with the liberalization of the external borrowings policy, the gradual withdrawal of capital account restrictions and improved credit ratings. During this period, country suffered with balance of payment (BoP) crisis, mainly due to increase in non-oil imports, capital inflows through the external assistance and the private commercial borrowings. About one fourth of the financial needs of the country during the period of 1985 were provided by ECBs. But, in 1991, due to shift in government policy from debt to non-debt financial flows, the importance of ECBs gradually came down.

Economic reforms since 1991, on one hand has resulted in downfall of Developmental Financial Institutions (DFIs) and on the other hand led to massive borrowings from external sector by corporate houses in the form of ECBs. Developmental Finance institutions like IFCI, IDBI, ICICI and SFCs were established to help industries by providing loans at subsidized rates to long term industries. However, the liberalization of ECB policy opened up an alternate route for low cost financing. As a result of which corporate sector borrowed heavily from global institutions that were willing to take risk and provide fund at lower cost rather than expensive funds available domestically.

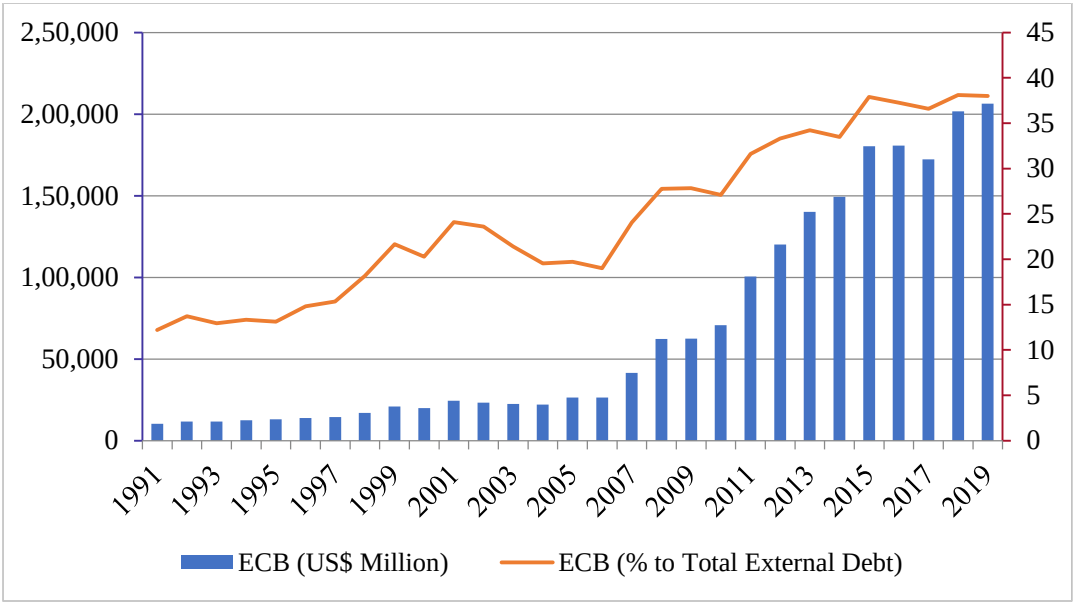
1.2 ECBs in Post Liberalization Period

The trends of ECBs show that the amount of gross ECB inflows in India declined during the years 1991-92 and 1992-93 and become negative in the later year. Thereafter till 1996-97 it had been increasing at a high rate, probably due to liberalization of policies, such as, raising the scope for overseas borrowings by corporates. This period witnessed increased trade-related credits, bank loans and increased inflows through convertible bonds placed in the Euro market. The turmoil in international financial markets caused by East Asian currency crisis, Argentina's default on its international bond obligations, Iraq conflict followed by global slowdown, high volatility in credit markets, low investors confidence and intense risk aversion interrupted developments in India's capital account and resulted into sharp decline in ECB during 1997 to 2001.

Though, the period 1998 to 2003 witnessed increases in stock of securitised borrowings mainly due to Resurgent India Bonds (1998) and India Millennium Deposits (2000), the total ECB outstanding has, however declined in 2000-01 and 2001-02 probably because of low investment, weak demand for

ECBs and prepayments of existing ECBs. In 2002-03 and thereafter, country observed increase in domestic industrial activity, increased demand for funds, favourable global rates of interest and liberalization of policy on ECBs. This resulted into continuous increase in gross inflows of ECBs. The global financial crisis, began in 2007 with a crisis in the subprime mortgage market in the US, and developed into a full-blown international banking crisis with the collapse of the investment bank Lehman Brothers on September 15, 2008 affected Asian markets also. The Indian economy also showed vulnerability. Due to increased openness of Indian economy in the past two decade, the financial crisis spilled over to India through financial channels. The Indian stock market was highly dependent on the foreign institutional investors. The value of rupee depreciated because of the capital withdrawals from India. Not only that, the global liquidity crisis decreased the ECBs of the Indian corporate and banking sectors which could be recovered by second quarter of the 2009-10 (Figure 1).

Figure 1: India's External Commercial Borrowings



Source: India's External Debt – Status Reports (Several Issues), www.minfin.nic.in

As shown in figure, the volume of ECBs has increased sharply after 2010; it was US$ 70726 million in 2010 which almost doubled and reached to US$ 140125 million in 2013. It rose continuously to US$ 180744 million in 2016, US$ 201727 million in 2018 and further to US$ 206400 million in 2019. Though a fall of 4.64 percent was observed in the year 2017 when ECBs in India was recorded at US$ 172358 million. The share of ECBs in India's total external debt is also increasing continuously and is

significant (more than 25 percent) in last ten years. It increased from 27.77 percent in 2008 to 34.22 percent in 2013, 37.9 percent in 2015 and further to 38.12 percent in 2018.

The sustained growth of overseas borrowings and the overall private capital flows to India in last two decades reflects the momentum in domestic economic activity, resilient corporate performance, a positive investment climate, a long-term view of India as an investment destination and the improved sovereign risk. Besides these factors, the prevailing higher domestic interest rate coupled with a higher growth rate has moderated the risk perception and created arbitrage opportunities.

1.3 Policy Framework

Ever since the BoP crisis of 1991-92, India has been conservative in the matter of external commercial borrowing (ECB). After that, annual caps were imposed on additional borrowing, particularly on short-term debt, and the end use of external commercial borrowings was restricted. This resulted into a situation of panic which gripped the markets and aggravated the liquidity crisis.

ECB can be accessed under two routes, viz. Approval and Automatic Route i.e. Access of funds under Automatic Route does not require RBI/ approval. Corporate including hotel, hospital, software sectors (registered under the Companies Act 1956) and Infrastructure Finance Companies (IFCs) except financial intermediaries such as banks, FIs, HFCs, and NBFCs are eligible to raise ECB. Units in SEZs are allowed to raise ECB for their captive requirements. NGOs engaged in micro finance activities are eligible to avail of ECB (subject to certain conditions). All entities (including LLPs) are eligible to receive FDI are eligible to raise ECB. Further the following entities are also eligible to raise ECB: Port trust, SIDBI and EXIM bank of India. Registered entities engaged in micro-finance activities i.e., registered Not for Profit Companies, registered societies/ trust/ cooperatives.

The overseas lenders are need to be a member of FATF (financial action task force) or IOSCO (International Organization for Securities Commission) compliant country. ECB can be raised by borrowers from internationally recognized sources such as international banks, international capital markets, multilateral financial institutions (such as IFC, ADB, CDC, etc.)/ Regional Financial Institutions and Government owned Development Financial Institutions, Export Credit Agencies, Suppliers of Equipments, Foreign Collaborators and Foreign Equity Holders (other than erstwhile

Overseas Corporate Bodies). Overseas organizations and individuals may provide ECB to NGOs engaged in micro finance activities subject to complying with some safeguards outlined in the RBI circular.

The ECB framework has been governed by the regulations of the RBI framed under the Foreign Exchange Management Act, 1999, and the ECB Master Direction, Trade Credit, Borrowing and Lending in Foreign Currency by Authorised Dealers and Persons other than Authorised Dealers. The RBI proposed to consolidate regulations governing all types of borrowing and lending transactions between a person resident in India and a person resident outside India in both foreign currency and Indian Rupee. It notified the foreign exchange management, borrowing and lending regulations, to replace the previous regulations.

RBI is easing the policy framework of ECBs for the purpose of improving the ease of doing business in India. In line with the revised Regulations and to further rationalise the existing framework for ECB and INR denominated bonds, the RBI issued a revised ECB policy on January 16, 2019. The previous framework for raising loans through ECB consisted of three tracks and a regime for Rupee denominated bonds (Masala bonds) listed on foreign debt exchanges. There are (i) Medium term foreign currency denominated ECB with minimum average maturity of 3-5 years, except in the case of manufacturing sector companies who could raise foreign currency denominated ECBs with a minimum average maturity period of only 1 year, (ii) Long term foreign currency denominated ECB with minimum average maturity of 10 years, (iii) INR denominated ECB with minimum average maturity of 3 to 5 years, except in the case of manufacturing sector companies who could raise INR denominated ECBs with a minimum average maturity period of only 1 year, and INR denominated bonds issued by an Indian entity in foreign markets of which the interest payments and principal reimbursements were denominated in rupees (called as Rupee Denominated Bonds).

The New ECB Policy (2019) has collapsed the existing four-tiered structure into just two tiers, depending on the currency. Tracks I and II have been merged into the category of Foreign Currency Denominated ECB. Track III and Rupee Denominated Bonds have been merged as Rupee Denominated ECB. The previous framework provided for a specific list of eligible borrowers under

each track; the New ECB Policy, however, permits a wider set of end-users to tap overseas markets for loans. The list has expanded to include all entities eligible to receive foreign direct investment, essentially permitting them to borrow through the ECB route.

Under the New ECB Policy, the end restrictions on the use of ECB are broadly similar to the previous framework: real estate activities, investments into the capital markets, equity investments and on-lending remain prohibited. The previous framework provided for multiple minimum average weighted maturities, depending upon the amount of borrowing. However, under the New ECB Policy, the RBI has kept the minimum average maturity period at 3 years for all ECBs, irrespective of the amount borrowed. Nevertheless, if a manufacturer raises overseas debt of up to USD 50 million in a financial year, the minimum average maturity period will be 1 year. Further, any ECBs raised from a foreign equity holder utilised for specific purposes will have a minimum average weighted maturity of 5 years. Under new norms ECB up to USD 750 million or equivalent per financial year, which otherwise are in compliance with the parameters and other terms and conditions set out in the new ECB framework, will be permitted under the automatic route not requiring prior approval of the RBI.

2.0 Literature Review

Though, a number of researchers in the past, extensively discussed issues related to international financial flows, there are a few studies on external debt and particularly on external commercial borrowings. Among these, some are micro level studies and others are macro level studies. The micro-level or the firm level studies on ECBs focused on the micro financial linkages and indicates the inefficiencies in the debt financing system of the country in channelizing the funds, the increasing dependence of firms on ECBs and hedging of foreign exchange exposure by the Indian Corporates. The macro level studies indicate the broader classification of various causes that affects on economy of a country. These basically include domestic and external factors that significantly affect the demand for foreign currency borrowing, the emergence pro-cyclical nature of capital flows and future prospects of a country significantly influencing the external financial flows. Some researchers also discussed effects of ECBs on country's overall economic performance. Following section presents a

brief review of prominent studies on ECB and related issues carried out by researchers in India and abroad.

Ray et al. (2017) analyzed trends, composition and determinants of ECBs in the India during a period from 2000 to 2015. They mentioned that capital account openness is indicative of the role of the regulatory regime and the growth differential between India and the international economy will be a key driver influencing ECB flows to India. They also mentioned that inflationary condition, partially flexible exchange rates and reduction in the interest rate structure is encouraging domestic credit growth which can discourage ECB flows to India. Pal and Bose (2017) in a study on debt flows to developing countries after recent financial crisis discussed the case of high level of debt in China and mentioned that any major problem associated with debt servicing in the country is likely to have global fallout. He also mentioned that external debt-GDP burden is far more modest in India.

Bose et al. (2017) analyzed the impact of the export-oriented policy initiatives in enabling greater globalization of and access of Indian firms to ECB. They also analyzed the sensitivity of exporting activities across financially vulnerable firms and industries and observed that firms with access to ECB have higher exporting activity compared to matched companies with only domestic sources of financing. The results suggest that this effect is particularly stronger for firms which receive extra incentives in the form of grants and subsidies. Moreover, when financially constrained firms and firms operating in vulnerable industries gain access to foreign financing, they are able to increase their export participation.

Patnaik et al. (2016) recapitulated the existing regulations governing the external commercial borrowings in India and described their influence on the ECB inflows in India. Besides discussing the liberal attitude of the government in encouraging the ECBs, they pointed out the systemic risk emanating from the un-hedged borrowings of the corporates and suggested some policy measures to address these concerns.

Alisauskaite-Seskiene et al. (2015) studied the internal and external factors that determine physical entities' borrowing in Lithuanian finance market. He considered internal factors as, the need of cash and the wish to facilitate daily financial operations, and favorable borrowing terms, favorable interest

rates and recommendations of other people as external factors. He mentioned that that the significance of particular internal factor depends on physical entities' demographic characteristics, such as, age, occupation, monthly gross income and marital status, while that of the external factors depends on physical entities' gender.

Patnaik et al. (2015) examined how currency exposure of firms varied with currency flexibility. By studying the framework, the outcomes, the concerns, the recent changes and the remaining challenges, the authors explained that at present in India, the resource allocation does not match up to the normative ideal. A major fraction of ECB is taking place in companies who do not have natural hedges. They suggested that shifting of the resource allocation towards the normative ideal will require measures of capital controls with a focus on reducing unhedged currency exposure.

Arunperumal (2014) while analyzing the impact of interest rate differential, currency appreciation and domestic activity on ECBs in India mentioned that during 2003-2014, ECBs were majorly affected by these factors. He observed that an increasing share in the industrial and service sector of India led to the use of ECBs for overseas investments; the interest rate differentials too have some effect on the demand for ECBs and the exchange rate is an important variable that explains changes in external borrowings.

Ye et al. (2014) studied the influence of exchange rate regimes on foreign exchange risk of selected firms from twenty emerging economies. They observed that firms in countries with non-floating exchange rate have higher exposure compared to firms in countries with floating exchange rates. They also mentioned that exchange rate system matters at both micro and macro level and a non-floating arrangement fail to protect firms from exchange rate risk.

Kapoor (2014) made an attempt to examine whether exchange rate, interest rate differential and real domestic activities drive the Indian corporates' behavior to borrow from overseas capital markets and influence the ECB pattern in the country. She observed positive relation between real domestic activity and foreign borrowings by corporates. The coefficient for exchange rate revealed that an appreciation of domestic currency induces ECB, and the demand for overseas borrowings is predominantly influenced by interest rate differential.

Dev (2012) empirically examined sensitivity of ECB in India with exports, imports, index of industrial production, foreign investment, exchange rate and interest rate differential taking quarterly data for the period September 1999 to September 2012. The results revealed that the long run ECB is influenced by the import, index of industrial production, interest differential, exchange rate, and foreign investment. While, in long run, ECB had a positive relationship with index of industrial production, interest rate differential and exchange rate, it exhibited negative relationship with imports and foreign investment. In the short run, imports and interest rate differential had positive relationship with ECB, while, export exhibited a negative relationship.

Verma and Prakash (2011) empirically tested the interest rate sensitivity of four major components of capital flows, viz., FDI, FII inflows, ECBs and NRI deposits. The results reveal that ECBs and NRI deposits are interest sensitive; though policy interventions by authorities do tend to reduce interest rate sensitivity. The authors mentioned that monetary policy needs to take cognizance of the fact that debt flows, like ECBs and NRI deposits are impacted both by interest rate as well as exchange rate movements.

Singh (2009) in a study analyzed trend and composition of capital inflows in India. He mentioned that though ECBs are majorly influenced by domestic real activity, interest rate differentials; the global credit market shocks also have a significant impact on ECB flows to India. He observed that demand shocks have affected corporates' overseas borrowing behavior during normal times; the external credit shocks had major impact during crisis times. He further observed that the NRI deposits were influenced predominantly by exchange rate movements, interest rate differentials and domestic real activity and thus were considered volatile in nature.

Oura (2008) analyzed the corporate financing behavior of 9000 selected firms from different sectors of Indian economy and investigated the relationship between financing patterns, external dependence and inefficiency during a period 1993-94 to 2005-06. The author explored the micro financial linkages and pointed out the increasing dependence of Indian firms on ECBs. Highlighting the inefficiencies in the Indian financial system, particularly the debt financing system in channelizing the funds, he mentioned that the firms that depend on ECB tend to grow more slowly.

Patnaik and Shah (2008) examined how currency exposure of firms varied with currency flexibility. By studying the firm behavior in alternating high and low currency volatility periods, they tested the moral hazard versus the incomplete market hypothesis. The results of study supported moral hazard hypothesis, implying that Indian firms are reluctant to hedge their foreign exchange exposure in case of low currency flexibility.

Singh (2007) in a study on corporate choice for overseas borrowings in India mentioned that real activity alone explains about 38 per cent of the variation in external borrowings over the 10 quarter and interest rate differentials (arbitrage) is the second most important variable explaining changes in external borrowings. The credit constraint also is a significant variable influencing corporates decisions about overseas borrowings. As the contribution of the broad money representing the liquidity conditions, though small over the shorter horizon, gets prominent over the medium term with almost a six-fold increase by the terminal period.

Among researchers who examined impact of ECBs, Goyal (2014) elaborated various aspects of capital inflows to India and their macroeconomic implications. He observed significant influence of capital inflows on macroeconomic variables in the economy and mentioned that policymakers should take suitable measures to ensure favorable impact these inflows on the economy.

Patnaik et al. (2014) used quasi-experimental design to analyze the impact of foreign currency borrowing at the firm level. They observed that Indian arrangements for foreign borrowing are not fraught with risk owing to original sin. At the same time, foreign borrowing is not going to financially constrained firms, and it is not filling the gaps in access to capital in the domestic financial system.

Okonkwo and Odularu (2013) used vector autoregressive to identify the relationship between external debt, debt burden and economic growth in selected West African states during a period 1970 to 2007. The results revealed that external debt and the debt burden (induced by debt servicing) had a direct negative effect on output growth. They also mentioned that contrary to the debt overhang hypothesis through the effect on investment, a cursory investigation of the debt-investment relationship suggests that external debt spurs rather than impede investment; and debt servicing crowds out the investment.

Ogbonnia et al. (2013) in a study on external borrowings and economic performance in context of Nigeria observed negative and significant effect of government external borrowings on GDP as well as gross fixed capital formation. Based on findings, they concluded that government's external debt is not favorable for Nigeria's long run economic performance. Therefore Nigerian government should reduce its financing expenditure using external debt. Instead, they should use more of domestic debt financing strategy since servicing external debt could be more expensive.

Prokop and Prokop (2012) examined the efficiency of foreign borrowing in Poland. They stated that the use of external sources to finance economic growth in Poland was quite efficient; the impact of foreign loans on the GDP was significantly positive and exceeded the costs of debts. They concluded that the efficiency of foreign borrowing was relatively high in sense that the policy of using external sources to finance economic growth was fully justified.

Eleje et al. (2010) examined the impact of external borrowings on economic performance in Nigeria as proxied by the gross fixed capital formation and the GDP. They mentioned that the external borrowings have not significantly contributed to growth and economic performance in Nigeria. They further mentioned that external debt overhang is the major factor that has contributed largely to the poor performance of the Nigerian economy in the last decade.

Patillo et al (2002) empirically investigated the relationship between total external debt and GDP growth rate of developing countries over a period of 29 years, starting from 1969. They concluded that the relationship between external debt and economic growth is nonlinear in the form of an inverted U shaped curve. By implication, at low levels of external debt, growth is affected positively but at higher levels of total debt, the relationship becomes negative.

3.0 Need of Study

It is true that the focus of ECBs is motivated to enhance the economic development. In the past few years ECBs have emerged as one of the instruments preferred by Indian companies to raise debt. But, the important causes of concern with regards to ECBs are, increasing demand of ECBs and its maturity period. The recent trend in ECBs indicates 105.42 percent rise in the volume of ECBs in India over a period from 2011 to 2019. In the composition of India's external debt the share of ECBs

has increased from 31.6 percent to 38.01 percent in the same period. The average maturity period of borrowings also has declined steadily from about 6.5 years in 2014-15 to 5.22 years in 2018-19.

CARE observed few factors responsible for the sharp rise in ECBs. These are: high interest rates, tightening liquidity in the domestic economy putting pressure on companies to look for external sources of financing, slowing activity in the corporate bonds market, and the continued stress in the banking sector. All this is an advance indication of the nature of pressure ECBs could put on India's external debt profile, the exchange rate fluctuations and overall management of the external sector.

It is quite evident from the literature survey that there is hardly any study focusing on various dimensions of external commercial borrowings in reference to India. Hence, the researcher feels the need to investigate various aspects of ECBs in Indian context. The present study proposes to focus on the government policy paradigm on ECBs, the trend, pattern and composition of ECBs, analysis of factors influencing ECBs and the impact of ECBs on India's macroeconomic performance.

4.0 Objectives

- To present an analytical view of the government policy paradigm on external commercial borrowings in India.
- To analyze trend and composition of external commercial borrowings in India.
- To identify determinants of external commercial borrowings in the India and examine their role in influencing the ECB flows to India.
- To examine the impact of external commercial borrowings on India's macroeconomic performance

5.0 Research Methodology

The objective specific research methodology is as follows.

No.	Objective	Research Methodology
1.	To present an analytical review of the government policy paradigm on external commercial borrowings in India.	This objective will be achieved by using secondary information available in the publication of Reserve Bank of India (RBI), Ministry of Finance (GoI) and other relevant sources and analyzing the policy framework of GoI on external commercial borrowings. Efforts will be made to examine the effect of policy shift on ECBs flow to India.

2.	To analyze trend and composition of external commercial borrowings in India.	The trend and composition will be accomplished through analysis of the trend and composition of external commercial borrowings and its related components by using trend analysis.
3.	To identify the causes and determinants of external commercial borrowings in the India and examine their role in influencing the ECB flows to India.	For this the researcher will thoroughly review available literature and reports to identify important determinants of ECB flows; then examine their role in influencing the ECB flows to India by using test of Stationary, Granger Causality test, Vector Autoregressive Model (VAR), Variance Decomposition Analysis and Impulse Response Function (IRF).
4.	To examine the impact of external commercial borrowings on India's macroeconomic performance.	To examine the impact the researcher will first identify the parameters that are influenced by ECB inflows, and then analyze their sensitivity by using test of Stationary and Causality, VAR, Variance Decomposition and IRF.

5.1 **The Data:** Annual data of 30 years spanning from 1991 to 2020 on ECBs and its related variables will be taken into consideration.

The prominent determinants of ECBs observed through review of past studies are interest rate differentials, exchange rates and hedging, credit rating of domestic economy, foreign investments, index of industrial production, international liquidity and growth of domestic activities. The researcher will however, make efforts to identify more country specific factors during the course of study and examine their role in influencing the ECB flows to India.

There are a few studies on effects of ECBs on macroeconomic performance of a country. These studies examined the impact of ECB flows on index of industrial production, trade (imports and exports), balance of payment, foreign exchange reserves and net capital formation. Certain other relevant variables may be considered be the researcher during the course of study.

5.2 **Source of Information**: The source of information will include the statistical base of the official website of Ministry of Finance (GoI), The Reserve Bank of India (RBI), International Monetary Fund (IMF). The researcher will collect more information from Books, Journals, Reports, Working Papers, News Papers, and other relevant sources.

5.3 **Analytical Methods**

Test of Stationary, Granger Causality Test, Vector Autoregressive Model (VAR), Variance Decomposition Analysis, Impulse Response Function (IRF) and other suitable method(s) as per need. The research methodology to achieve the proposed objectives of the study is mentioned in the table.

6.0 Chapter Plan

Chapter 1: Introduction

Chapter 2: Policy Paradigm on External Commercial Borrowings in India

Chapter 3: Trends and Composition of External Commercial Borrowings in India

Chapter 4: Determinants of External Commercial Borrowings in India

Chapter 5: Impact of ECBs on India's Macroeconomic performance

Chapter 6: Key Observations, Conclusion and Suggestions

India's External Commercial Borrowings			
Year	External Debt (US$ Million)	Ext. Com. Borrowings (US$ Million)	ECB (% to External Debt)
1991	83,801	10,209	12.18
1992	85,285	11,715	13.73
1993	90,023	11,643	12.93
1994	92,695	12,363	13.33
1995	99,008	12,991	13.12
1996	93,730	13,873	14.8
1997	93,470	14,335	15.33
1998	93,531	16,986	18.16
1999	96,886	20,978	21.65
2000	98,263	19,943	20.29
2001	101,326	24,408	24.08
2002	98,843	23,320	23.59
2003	104,914	22,472	21.41
2004	112,653	22,007	19.53
2005	134,002	26,405	19.7
2006	139,114	26,452	19.01
2007	172,360	41,443	24.04
2008	224,407	62,334	27.77

2009	224,498	62,461	27.82
2010	260,935	70,726	27.1
2011	317,891	100,476	31.6
2012	360,766	120,136	33.3
2013	409,374	140,125	34.22
2014	446,178	149,375	33.47
2015	474,675	180,295	37.9
2016	484,989	180,744	37.26
2017	471,308	172,358	36.57
2018	529,156	201,727	38.12
2019	543,000	206,400	38.01
Source: External Debt Status Reports (Several Issues), Ministry of Finance, Department of Economic Affairs, Govt. of India, www.minfin.nic.in			

References

Research Papers

- Alisauskaite-Seskienea, I., Remeikienea, R. & Gasparenienea, L. (2015) The Factors That Determine Physical Entities' Borrowing: Lithuanian Case. *Procedia Economics and Finance*, Science Direct Elsevier, Volume 26.
- Arunperumal, A. (2016) External Commercial Borrowings in India - An Overview. *International Journal on Recent and Innovation Trends in Computing and Communication.* ISSN: 2321-8169 Volume: 4 Issue: 11.
- Ayadi F (2008), "The impact of External Debt on Economic growth: A comparative study of Nigeria and South Africa", Journal of Sustainable Development in Africa, Volume 10, PP-03.
- Bose, U., Mallick, S. & Tsoukas, S. (2017) Does Easing Controls on External Commercial Borrowings boost Exporting Intensity of Indian Firms? *Conference paper*,

https://ifrogs.org › PDF › CONF_2017 › Bose_Mallick_Tsoukas_2017.

- Calvo, G.A., Leiderman, L. & Reinhart, C.M. (1994) Inflows of Capital to Developing Countries in the 1990s: Causes and Effects. *Inter-American Development Bank Office of the Chief Economist,* Working Paper 302.
- Desai, N. (2019) External Commercial Borrowings: regulatory framework substantially relaxed. *Regulatory hotline.*
- Dev, S. (2012) External Commercial Borrowings in India and its Sensitivity to Macroeconomic Factors: An Empirical Analysis. *Finance Area, Institute of Management and Information Science.* https://ssrn.com/abstract=2406766.
- Barry, E., Hausmann, R. & Panizza, U. (2007). Currency Mismatches, Debt Intolerance, and the Original Sin: Why They Are Not the Same and Why It Matters. In: *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices and Consequences*. NBER Chapters. National Bureau of Economic Research, Inc.

- Eleje, Edward Ogbonnia, E., Wilson, A. & Ezeudu, I. (2010) External Borrowings and Economic Performance in Developing Nations: Empirical Evidence from Nigeria. *Open Research Journal of Economics and Finance*, Vol. 1, No.1, May 2013.
- Goyal, M. (2014) Macroeconomic Implications of Total Capital Inflows in India. *International Research Journal of Commerce Arts and Science*. Volume 5. Issue 3.
- Gupta, S. (2014) External Commercial Borrowing: Quest in India. *International Journal of Multidisciplinary Approach and Studies,* Volume 01, No. 4.
- Kapoor, S. (2014) External Commercial Borrowings- An Analysis. *Dissertation for the Degree in Master of Science in Economics,* University of Dublin, Trinity College, Dublin.
- Kumarasamy, U. (2012) Does Foreign Exchange Reserve Affect External Commercial Borrowings – Indian Pragmatic Indication. *Journal of Arts, Science & Commerce,* Vol. III, Issue 2(2).
- Ogbonnia, E., Wilson, A. & Ezeudu, I. (2013) External Borrowings and Economic Performance in Developing Nations: Empirical Evidence from Nigeria. *Open Research Journal of Economics and Finance,* Vol. 1, No. 1, May.
- Okonkwo, C.S. & Odularu, G.O. (2013) External Debt, Debt Burden and Debt Growth Nexus: Empirical Evidence and Policy Lesson from Selected West African Countries. *International Journal of Economics and Business Studies,* Vol.3, No.1.
- Oura, H. (2008) Financial Development and Growth in India: A Growing Tiger in a Cage? *IMF Working Paper Asia and Pacific Department,* WP/08/79.
- Pal, P. Bose, A. (2017), A note on External Commercial Borrowings in India: Rapid growth amidst some vulnerabilities, *IIM Calcutta,* working paper. https://rbidocs. rbi.org.in/rdocs/wss/pdfs
- Patnaik, I., Shah, A. & Singh, N. (2016) Foreign Currency Borrowing by Indian Firms: Towards a New Policy Framework. *National Institute of Public Finance and Policy,* NIPFP Working paper series, working paper no. 167.

- Patnaik, I., Shah, A. & Singh, N. (2014). Who Borrows Abroad and What are the Consequences?" Presented at 12th Research Meeting of NIPFP-DEA Research Program.
- Patnaik, I., Shah, A., & Singh. N. (2014) Understanding Foreign Currency Borrowing by Firms. *Paper not for circulation. https://www.isid.ac*.in› ~epu› acegd2015› papers›
- Patnaik, I., Shah, A., & Singh, N. (2015) Foreign Currency Borrowing by Indian Firms: Towards a New Policy Framework. *International Growth Centre,* working paper, September.
- Patnaik, I. & Shah, A. (2008) Does the Currency Regime Shape Unhedged Currency Exposure? *Journal of International Money and Finance 29,* https://www.sciencedirect.com› science› article.
- Pattillo, C., Poirson, H. & Ricci, L (2002) External Debt and Growth. *Finance and Development: A Quarterly Magazine from IMF*, June 2002, Volume 39, No. 2
- Prokopa, J., Prokopb, E. (2012) The efficiency of foreign borrowing: the case of Poland. *Science Direct Elsevie, Procedia Economics and Finance, International Conference on Applied Economics.* http://www.sciencedirect.com>science>article
- Ray, P., Sur, A. & Nandy, A. (2017), India's External Commercial Borrowing: Trends, Composition, and Determinants. *Indian Institute of Management Calcutta,* WPS No. 802, RBI (2018-19), Master Circular. RBI/2018-19/109, AP (DIR Series), Circular No. 17.
- Hausmann, R. & Panizza, U. (2003), "The Mystery of Original Sin", Kennedy School of Government, Harvard University, and Research Department Inter-American Development Bank
- Seskienea, I., Remeikienea, R. & Gasparenienea, L. (2015) The factors that determine physical entities' borrowing: Lithuanian. *Science Direct Elsevie, Procedia Economics and Finance.*
- Singh, B. (2007) Corporate choice for overseas borrowings: The Indian evidence. *RBI MPRA working paper No. 13220.*
- Singh, B. (2009). Changing Contours of Capital Flows to India, *Economic and Political Weekly, 58-66.*
- Singh, C. (2010) Trend analysis and composition of capital inflows in India. *International Research Journal of Commerce Arts and Science,* Volume 4 Issue 3.

- Verma, R. & Prakash, A. (2011) Sensitivity of Capital Flows to Interest Rate Differentials: An Empirical Assessment for India. *Department of economic and policy research RBI working paper series.* WPS (DEPR) No. 7
- Ye, M., Hutson, E., & Muckley, C. (2014). Exchange rate regimes and foreign exchange exposure: The case of emerging market firms. *Emerging Markets Review,* 21.

Books and Reports

- Acharya Shankar (2012), India: After the Global Crisis, *Orient Black Swan Private Limited*, Hyderabad.
- Asteriou Dimitorios (2006), Applied Econometrics: A Modern Approach Using E-Views and Microfit, *Palgrave Macmillan Limited*, Hampshire.
- Gujarathi Damodar N (2009), Basic Econometrics, Fifth Edition, *McGraw-Hill Higher Education*, New York
- Gujarathi Damodar N (2011), Econometrics by Example, *Palgrave Macmillan Limited*, Hampshire
- Maddala GS (2001), Introduction to Econometrics, Third Edition, *John Wiley and Sons*, Singapore.
- Panneerelvam R (2011), Research Methodology, *PHI Learning Private Limited*, New Delhi
- Patterson Kerry (2002), An Introduction to Applied Econometrics: A Time Series Approach, *Palgrave Macmillan Limited*, Hampshire
- RBI (2018-19), Master Circular. *RBI/2018-19/109, A.P. (DIR Series),* Circular No. 17.
- Report of the Committee to Review the Framework of Access to Domestic and Overseas Capital Markets (MS Sahoo, 2015). *Ministry of Finance Government of India* (Phase II, Part II: Foreign Currency Borrowing) (Report III).
- Report on External Debt Status (2016), *Ministry of Finance, Department of Economic Affairs, External Debt Management Unit, Govt. of India*, www.finmin.nic.in